

(12) INTERNATIONAL APPLICATION PUBLISHED UNDER THE PATENT COOPERATION TREATY (PCT)

(19) World Intellectual Property Organization

International Bureau



(43) International publication date

28 April 2005 (28.04.2005)

(10) International publication number

WO 2005/038083 A1

PCT

(51) International patent classification⁷:

C23C 18/16, 18/54, 8/42

(81) Designated states (unless otherwise indicated, for every kind of national protection available): AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW.

(21) International application number:

PCT/FR2004/050487

(22) International filing date: 6 October 2004 (06.10.2004)

(25) Language of filing: French

(26) Language of publication: French

(30) Data relating to the priority:

03/12,200 14 October 2003 (14.10.2003) FR

(84) Designated states (unless otherwise indicated, for every kind of regional protection available): ARIPO patent (BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW), Eurasian patent (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM), European patent (AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PL, PT, RO, SE, SI, SK, TR), OAPI patent (BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG).

(72) Inventors; and

(75) Inventors/Applicants (US only): MAURIN-PERRIER, Philippe [FR/FR]; 17 Rue Antoine Dupuy, F-42680 Saint Marcellin En Forez (FR). HEAU, Christophe [FR/FR]; 22 Rue Voltaire, F-42100 Saint-Etienne (FR).

Published:

- with International Search Report
- before the expiration of the time limit for amending the claims and to be republished in the event of receipt of amendments

For an explanation of the two-letter codes and the other abbreviations, reference is made to the explanations ("Guidance Notes on Codes and Abbreviations") at the beginning of each regular edition of the PCT Gazette.

As printed

(54) Title: METHOD FOR TREATING FERROUS ALLOY PIECES BY SULPHIDISATION

(54) Titre : PROCEDE DE TRAITEMENT PAR SULFURATION DE PIECES EN ALLIAGE FERREUX

(57) Abstract: The invention relates to a method for treating ferrous alloy pieces by sulphidisation. According to said method, the pieces are immersed in a bath of aqueous solution with concentrations of soda, sodium thiosulphate, and sodium sulphide, without passing an electrical current through said bath, and the solution is brought to a temperature of between approximately 100 °C and 140 °C over a period of between approximately 5 and 30 minutes.

(57) Abrégé : Selon ce procédé, on immerge les pièces dans un bain d'une solution aqueuse, sans passage d'un courant électrique, avec des concentrations de soude, de thiosulfate de sodium et de sulfure de sodium, ladite solution étant portée à une température comprise entre environ 100°C et 140°C et pendant une durée comprise entre 5 et 30 minutes environ.